

REMARKS

Upon entry of the present amendment claims 1-12 are canceled without prejudice. Claims 13-21 remain in the application.

35 USC §103(a) Rejection

Claims 1-6, 9-11 and 13-18 were rejected under 35 USC §103(a) as unpatentable over Johnsen et al. (Pub. No. US2002/0054957). Johnsen et al. was cited for disclosing: a coating composition comprising a solvent-borne coating, and a method of forming a coating composition. The office action states that the components of the claimed coating composition and method of forming a coating composition are generally taught by Johnsen et al. The office action states that while Johnsen et al. does not teach the specific combination of crosslinkers claimed in the present invention, suitable curatives comprising one or more of amines, amino functional polymers selected from the general classes of aliphatic amines and polyamines, polyamides, amidoamides, polyoxyalkylene amines, modified aryl-aliphatic amines, cycloaliphatic amines and polyamines, aromatic amines, Mannich bases, phenalkamines, amino functional silicones or silanes including epoxy adducts and ketimines thereof. The list of materials provided by Johnsen et al. It was stated that the list of materials provided by Johnsen et al. to form a blend is relatively small and hence it would be reasonable to expect that one skilled in the art would have chosen a blend of a phenalkylamine and polyamine as an amine hardener blend in the coating composition.

Applicants submit that the amended claims which define a method for forming a stable pigment dispersion in a coating comprising an epoxy resin comprising a glycidyl ether group, by using a combination of phenalkamine and polyamide crosslinkers is not obvious based on Johnsen et al. In order to render the present invention obvious, the reference must teach or suggest all of the claimed limitations. There must be a reasonable expectation of success and there must be suggestion or motivation in the reference or in the knowledge generally available to one of ordinary skill in the art to modify the art. The present invention specifically addresses a method for solving a problem encountered in epoxy resin containing coatings where the epoxy resin contains glycidyl ether groups as compared to glycidyl ester groups, (paragraph 8). The Johnsen et al. reference does not provide motivation for the instantly claimed invention as it does not teach or suggest a method for stabilizing pigment dispersion in a coating composition utilizing epoxy resins with glycidyl ether groups. The reference does not suggest a problem with

pigment stability in a coating, so it cannot teach a method for solving such a problem. The reference does not suggest or teach that the use of polyamide as a crosslinker will stabilize the pigment dispersion in a coating. The reference merely provides a laundry list of various crosslinkers and the reference examples teach a combination of an epoxy cycloaliphatic polyamine adduct with epoxy polyamine. The requirement that the reference provide motivation for the present invention is not met and accordingly, Applicants submit that the instant claims 13- 21 are not obvious in view of Johnsen et al. and request withdrawal of the obviousness rejection.

Regarding the mixture of crosslinking agents, Johnsen et al. does not teach using at least 2% by weight of a polyamide functional compound. The examples at paragraph 119 of Johnsen et al. show 50:50 ratios of epoxy cycloaliphatic amine and epoxy polyamine. The reference does not suggest the method of the instant claims for forming a stable pigment dispersion with the crosslinkers defined in the instant claims. The instant claims define that the presence of at least 2% of polyamide functional compound enhances pigment stability in the coating composition. The use of 50:50 ratios of epoxy cycloaliphatic amine and epoxy polyamine does not suggest the addition of polyamide to stabilize the pigment dispersion in a coating composition.

The office action stated that the teaching of Johnsen et al. do not explicitly disclose that pigments are stabilized in dispersion by the phenalkamine compound. The office action states, citing *In re Spada*, 911 F.2d, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990), that "products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present."

Additionally, the office action states that Johnsen et al. does not explicitly disclose that the composition is for automotive refinish applications cured at temperatures above 32° F and below 120°F, but because the preamble merely recites the intended use and the prior art satisfies the future limitation merely because it is capable of this intended use. Applicants submit that the claims drawn to the composition have been canceled and that the rejection is now moot in view of the cancellation of the claims.

The office action further states that the blend of crosslinkers in a 50:50 ratio is taught in the Johnsen et al. reference and it would have been obvious to one of ordinary skill in the art to use the ratios of phenalkamine to polyamide as defined in claims 3-6, 9, 15-18 and 21.

Applicants submit that Johnsten et al. does not provide for a method as defined in the instant claims and therefore does not teach or suggest a coating having the same properties as the coating defined in the instant claims. Applicants submit that the methods for preparing coatings using crosslinkers other than the polyamide crosslinker do not provide the pigment stability shown in the coatings of the present invention. The method defined in the instant claims requires the polyamide crosslinker be utilized to stabilize the pigment dispersion. As shown in the examples of the instant application, coatings prepared using no polyamide (Example F) resulted in settling of the pigment after 47 minutes. Examples containing 5% polyamide crosslinker settled after 4 hours. Examples containing 10% polyamide were stable from .8 hours to overnight. The reference provides no guidance for a method of stabilizing a pigment dispersion in a coating by using a polyamide crosslinker. In order to render the method defined in the instant claims obvious, Applicants submit that there must be some teaching of the problem solved by the method defined in the instant claims (i.e. settling of the pigment dispersion) in order for the method to be obvious in view of the reference. For the reason that there is no suggestion of the problem of pigment dispersion settling or the solution in using the polyamide, as defined in the instant claims, the claims are not obvious in view of Johnsen et al.

Claim 10 was rejected on the basis that Johnsen taught the pigment range defined in claim 10. Claim 11 was rejected on the basis that the fact that the coating cured at ambient temperatures did not distinguish the claim if there was not a structural difference between the claimed invention and the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Claims 10 and 11 are canceled without prejudice and therefore the rejection is moot and applicants have not addressed it substantively.

Claims 7, 8 and 19-21 were rejected under 35 USC §103(a) as being unpatentable over Johnsen et al. in view of Osterhold et al. Johnsen et al. was cited for disclosing use of pigments such as diketo pyrrolo-pyrol, ferro pigments, fluorescent pigments, metallic pigments and flakes, although it did not specifically disclose the pigments defined in claims 7, 8, 19, 20 and 21.

Osterhold et al. was cited for disclosing a blend of amine hardeners to provide corrosion protection of metals. The office action concluded that Osterhold et al. demonstrated that

pigments set forth in instant claims 7,8,19 and 20 were recognized in the art as suitable pigments that fall under the description of suitable pigments in Johnsen et al. The office action concluded that it would have been obvious to one of ordinary skill in the art at the time of the invention to use any of the pigments set forth in claims 7, 8, and 19-21 as taught by Osterhold et al. in the composition of Johnsen because Osterhold et al. demonstrate that these pigments are recognized in the art as suitable pigments for epoxy-based coating compositions, resulting in colored coatings used to provide corrosion protection of metals.

Applicants submit that the instant claims 13-21 are not obvious over the combined Johnsen et al. and Osterhold et al. references for the reason that Osterhold teaches an aqueous coating composition and does not provide motivation for the method of the present invention for providing pigment dispersion stability in a solvent coating. There is no suggestion of pigment stability problems in the Osterhold et al. coating and no suggestion of a method to provide stability of a pigment dispersion. Motivation for the instant method is not provided in Johnsen et al. for the reasons discussed above. Additionally, Johnsen et al. does not teach or suggest the pigments of the present invention. Since the combined references do not provide motivation for the method defined in the instant claims, the claims are not obvious in view of the combination and withdrawal of the rejection is respectfully requested.

In view of the amendments to the claims and the arguments set forth hereinabove, Applicants through their attorney, respectfully request reconsideration and allowance of the claims.

Respectfully submitted,



Anne G. Sabourin
Reg. No. 33,772
Patent Attorney
(248) 948-2021

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BASF Corporation
26701 Telegraph Road
Southfield, MI 48034-2442

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Applicants submit that the amended claims which define a method for forming a stable pigment dispersion in a coating comprising an epoxy resin comprising a glycidyl ether group, by using a combination of phenalkamine and polyamide crosslinkers is not obvious based on Johnsen et al. In order to render the present invention obvious, the reference must teach or suggest all of the claimed limitations. There must be a reasonable expectation of success and there must be suggestion or motivation in the reference or in the knowledge generally available to one of ordinary skill in the art to modify the art. The present invention specifically addresses a method for solving a problem encountered in epoxy resin containing coatings where the epoxy resin contains glycidyl ether groups as compared to glycidyl ester groups, (paragraph 8). The Johnsen et al. reference does not provide motivation for the instantly claimed invention as it does not teach or suggest a method for stabilizing pigment dispersion in a coating composition utilizing epoxy resins with glycidyl ether groups. The reference does not suggest a problem with

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